VBKK

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of	)	
	)	
HAWAIIAN ELECTRIC COMPANY, INC.	)	
	)	DOCKET NO. 05-0069
For Approval and/or Modification	)	
of Demand-Side and Load Management	)	
Programs and Recovery of Program	)	
Costs and DSM Utility Incentives	)	
	)	

RESPONSES TO INFORMATION REQUESTS
OF THE COUNTY OF MAUI

AND

CERTIFICATE OF SERVICE

DEPARTMENT OF THE CORPORATION COUNSEL 205

BRIAN T. MOTO 5421-0
Corporation Counsel
CINDY Y. YOUNG 7443-0
Deputy Corporation Counsel
County of Maui
200 S. High Street
Wailuku, Maui, Hawaii 96793
Telephone: (808) 270-7740
S:\CLERICAL\EK\PUC\HECO050069COM Responses to IRs 07-03-06.wpd
Attorneys for Intervenor
COUNTY OF MAUI

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of	)	
	)	
HAWAIIAN ELECTRIC COMPANY, INC.	)	
	)	DOCKET NO. 05-0069
For Approval and/or Modification	)	
of Demand-Side and Load Management	)	
Programs and Recovery of Program	)	
Costs and DSM Utility Incentives	)	
	)	

COUNTY OF MAUI RESPONSES TO INFORMATION REQUESTS BY HECO, MECO, AND HELCO

HECO/COM-FSOP-IR-101 Ref. COM FSOP, page 6.

Please explain how the Commission would determine that the costs and benefits for implementing low income DSM programs are reasonable.

RESPONSE

The Commission would determine the reasonableness of the costs and benefits of low income DSM programs in the same way as it currently does for its existing DSM programs, with the Commission emphasizing its planning judgment, instead of the cost effectiveness tests. For example, MECO's existing residential solar and heat pump water heating programs do not meet the Total Resource Cost Test (B/C Ratio = 0.85), the Societal Cost Test (B/C Ratio = 0.66), and the Rate Impact Measure Test (B/C Ratio = 0.66).[1] However, MECO and the Commission focused on other matters in supporting MECO's

[1] Docket No. 99-0004, Maui Electric Company, Limited, IRP Plan - Report, Book 1 of 1, page 6-12.

existing residential efficient water heating programs. In Docket No. 99-0004, MECO IRP Plan - Report, Book 1 of 1, page 6-8, MECO states its planning judgment as follows:

> The residential efficient water heating program may not be cost effective based on the results of the total resource cost test as shown in Table 6.3.2.1-7. However, MECO believes it should be continued because a solar water heater utilizes an environmentally clean, renewable energy resource, and both the solar and conventional efficient water heaters provide peak demand impact savings which is needed in order to defer near term generation capacity additions. Similarly, the solar water heater component of the residential efficient water heating program is a major contributor to meeting the state's and county's renewable energy objectives. Lastly, since water heating is a major portion of electricity usage in a home, switching to an efficient system significantly reduces burning of oil and the related emissions. Therefore, the REWH program is also a major part of MECO's Climate Challenge and Renewable activities and should be continued.

HECO/COM-FSOP-IR-102 Ref. COM FSOP, page 10.

a. What is the typical kilowatt size of a plug-in hybrid electric vehicle?

RESPONSE

A typical plug-in hybrid electric vehicle can generate bursts of 50-100 kW on-board, but 15 kW is a reasonable analytical assumption, based upon limits on building wiring capacity.[2]

[2] County of Maui Final Statement of Position, Appendix A, page 2, Table 1, footnote k.

HECO/COM-FSOP-IR-102

b. Please provide a list of original equipment manufacturers offering plug-in hybrids, the battery storage capacity (in kwh) of plug-in hybrids, and the peak kilowatt load during charging.

RESPONSE

The County of Maui is aware of four original equipment manufacturers that are reported to be working on plug-in hybrid electric vehicles: DaimlerChrysler, Toyota, GM, and Ford. It is our understanding that DaimlerChrysler is the only original equipment manufacturer currently producing a prototype plug-in hybrid electric vehicle for public testing. The DaimlerChrysler plug-in Sprinter Van has a battery capacity of 14 kWh (see www.daimlerchrysler.com/dccom/0-5-7165-1-456546-1-0-0-0-0-0-1371-7165-0-0-0-0-0-0-0.html). We do not know the peak kilowatt charging load of the plug-in Sprinter Van.

HECO/COM-FSOP-IR-103 Ref. Load Management Programs

Does the County of Maui support utility administration of load management programs?

RESPONSE

Yes, we support MECO administration of load management programs.

COUNTY OF MAUI RESPONSES TO INFORMATION REQUESTS BY THE DIVISION OF CONSUMER ADVOCACY

CA/COM-IR-1 Ref. Final Statement of Position

On page 7, COM recommends that "a specific percentage of DSM funds be dedicated for low income programs in order to provide a predictable revenue stream" for program planning. On pages 3-4, however, the COM recommends "pursuit of all appropriate, available, and feasible demand-side options" instead of a specific energy efficiency goal.

a. Based on the above, how does the COM reconcile these two statements?

RESPONSE

The COM feels that the two statements are consistent. The Commission would establish a funding level for low income DSM programs and then use its planning judgment in its determination of what constitutes "appropriate, available, and feasible." Also see the response to HECO/COM-FSOP-IR-101 for further explanation.

CA/COM-IR-1

b. Would the total amounts of DSM not vary over time, so that the use of a specific percentage for low income programs will also vary? Explain why or why not.

RESPONSE

No, the use of a specific percentage would vary the total amounts of low income DSM over time.

is the common definition of and methodology to be used to define and quantify each goals's efficiency?

RESPONSE

The COM agrees with TGC with respect to the need to establish a different goal for TGC, from that of KIUC and HECO/MECO/HELCO. Regarding the quantification of efficiency goals, the COM does not feel that quantifiable goals are necessary or useful, see response to HREA-COM-IR-1, below.

COUNTY OF MAUI RESPONSES TO INFORMATION REQUESTS BY THE HAWAII RENEWABLE ENERGY ALLIANCE

HREA-COM-IR-1

On page 4, regarding whether energy efficiency (or DSM) goals should be quantified, HREA believes that our state's RPS is a valuable policy for increasing our use of renewables in Hawaii. Why not create a DSM portfolio standard as a complement to RPS, to increase our use of DSM measures?

RESPONSE

The COM does not see how a DSM portfolio standard will increase the amount of DSM measures implemented if the Commission enforces its IRP Governing Principle, where "Integrated resource plans shall be developed upon consideration and analyses of the costs, effectiveness, and benefits of all appropriate, available, and feasible supply-side and demand-side options." A specific percentage goal for DSM may create problems if the percentage is set too high. For example, what would happen if, after evaluating all appropriate, available, and feasible DSM options, the

percentage goal is not met? Would the Commission then approve DSM options that are not appropriate, available, or feasible, in order to meet the goal?

HREA-COM-IR-2

On page 5, regarding opposed dispatchable Demand-side DG, whether utility or third party administered, does the COM support customer rebates to encourage private investment in Demand-Side DG?

RESPONSE

The COM supports rebates, such as Austin Energy's $1 million rebate program for plug-in hybrid electric vehicle (see the COM FSOP, page 11). The COM also supports other incentives for dispatchable demand-side DG, such as financing programs and equipment assurance programs. An example of an equipment assurance program is MECO's residential solar water heater program, where MECO qualifies vendors, establishes equipment specifications, and provides installation inspection services.

HREA-COM-IR-3

On page 14, HREA supports the COM's suggested revisions to the definition of DSM with two following suggestions:
(1) load management (LM) be maintained as a separate category, as LM technologies can be deployed on either side of the utility meter, e.g., PHEVs, whereas most DSMs are deployed on the customer side of the meter.

RESPONSE

The COM disagrees because the premise of the HREA's understanding of plug-in hybrid electric vehicles (PHEVs) is incorrect. Load management should not be maintained as a

separate category because all load management resources, that we are aware of, are deployed on the customer's side of the meter. Regarding plug-in hybrid electric vehicles on the utility's side of the meter, the COM's literature review found no person or entity proposing such a configuration and the COM did not propose one in its Final Statement of Position. Further, we see no reason for, nor any consumer or public benefit from such a configuration.

HREA-COM-IR-4

(2) add a definition of distributed energy resources. Would the COM agree, and be willing to work collaboratively with the other Parties in the definition?

RESPONSE

The COM does not oppose a definition for distributed energy resources and the COM is willing to collaborate with the other Parties to define distributed energy resources. If a definition of distributed energy resources is needed, the COM would suggest the following for collaborative purposes:

> Distributed energy resources are relatively small scale, consumer energy technologies and systems, installed at, or in close proximity to, the end-user's location. Generally, distributed energy resources include 1) load management technologies, such as direct appliance load control systems (i.e., MECO's proposed residential water heating direct load control program) and interruptible load control systems for all or a portion of a facility's demand (i.e., MECO's proposed capacity buy-back program), 2) distributed generation technologies, such as dispatchable standby generators and combined heat and power systems; 3) distributed energy storage

Kauai Island Utility Cooperative
4463 Pahe'e St.
Lihue, HI 96766

WARREN S. BOLLMEIER, II, President — 1 copy
Hawaii Renewable Energy Alliance
46-040 Konane Pl., #3816
Kaneohe, HI 96744

RICK REED, President — 1 copy
Hawaii Solar Energy Association
Inter Island Solar Supply
761 Ahua St.
Honolulu, HI 96819

HENRY Q. CURTIS — 2 copies
Vice President for Consumer Issues
Life of the Land
76 North King St., Ste. #203
Honolulu, Hawaii 96817

LANI D.H. NAKAZAWA — 2 copies
County Attorney
CHRISTIANE L. NAKEA-TRESLER
Deputy County Attorney
Office of the County Attorney
County of Kauai
4444 Rice St., Ste. 220
Lihue, HI 96766-6315
Attorneys for COUNTY OF KAUAI

GLENN SATO, Energy Coordinator — 1 copy
c/o Office of the County Attorney
County of Kauai
4444 Rice St., Ste. 220
Lihue, HI 96766

DR. KAY DAVOODI — 1 copy
EFACHES
1322 Patterson Avenue, S.E.
Building 33, Floor 3
Room/Cube 33-3002
Washington, D.C. 20374